



Chattooga Conservancy's Comments on a "Draft Restoration Plan for the Foothills Landscape Project, Section I: Existing and Achievable Future Conditions," Chattahoochee-Oconee National Forest, dated March 19, 2017.

Abstract The document, "Draft Restoration Plan for the Foothills Landscape Project," heretofore referred to as "the document," is a product of The Foothills Landscape Collaborative sponsored by the USDA Forest Service, Chattahoochee National Forest. The mission of this collaborative effort is to create a restoration plan for the foothills landscape, "...that will guide the development of a proposed action" by the Forest Service, anticipated in October of 2017. The document was produced with input by the "collaborative community," which includes local, state and federal agencies, non-government organizations, coalitions/clubs, special interest groups, interested individuals and the Forest Service. This collaborative effort to come to a reasonable consensus on how we define and then go about restoring a native forest ecosystem could preempt much of the contentious objections (appeals and litigation) that oftentimes follows a proposed action by the Forest Service. The Chattooga Conservancy has thus far participated in the Foothills Landscape Project's meetings and workshops, in order to help achieve the goal of consensus for a plan for restoring the foothills landscape. We have made comments on this draft document, that follow, regarding the many areas of emphasis, assumptions, methodologies and omissions in the draft. We have done so in order for these comments to be considered for improvement of the document, and to address issues that could otherwise become future stumbling blocks at later stages of the project's development.

The following is a critique of the draft restoration plan document.

Summary The document summary is a fair representation of the shared, overarching ecosystem management goals to "restore and maintain native forest communities," and outlines issues related to achieving these goals, such as a need "...to create diverse and complex forest canopies" to provide both early successional and old growth habitats, restore and protect unique and aquatic habitats, as well as to maintain adequate road systems, sustainable recreation, and protection from wildfire. However, unresolved questions concerning the appropriate physical boundaries of the Foothills Ecoregion, the natural processes that sustain it, and the methods that we should use to restore functioning native forests, along with omissions of other vital issues as expressed by the collaborators, leads us to conclude that the document is lacking, and incomplete in enough substance to reflect consensus by the collaborative community.

Foothills Ecoregion First, we do not agree that the "foothills" ecoregion as defined by the document is correct. The "foothills" as delineated on early ecoregion maps (Roland Harper, 1930) shows that the transitional area between the Piedmont and Blue Ridge Mountain Ecoregions called the "foothills" does not extend into the Chattooga River watershed. In fact, Dr. Charles H. Wharton, in his landmark book *The Natural Environments of Georgia*, uses Roland's map to delineate the northern boundary of the foothills as near Tallulah Falls, which is almost 20 miles south of the area as defined in the draft restoration plan. Wharton defines the area to the north of the foothills near Tallulah Falls as being in the Blue Ridge Province, a predominantly broadleaf forest ecoregion. However, the draft document

defines this area above Tallulah Falls in the Chattooga River watershed as a foothills forest type, with a much greater pine component than Wharton's Blue Ridge Province forest classification.

While we do acknowledge that present forest conditions in the part of the foothills landscape, as defined in the document, north of Tallulah Falls as having a significant element of pine forests, we maintain that this is largely due to past disturbances from mass clearcutting during the timber boom years after the turn of the century, and from poor agricultural practices that created conditions for the proliferation of certain even-age stands of pioneer species including pine, locust and yellow poplar, that consequently does not reflect the true forest types in the ecoregion. The following quote from Wharton's *The Natural Environments of Georgia*, p. 124, under "Blue Ridge Province," states: "Pure pine forests in the mountains are almost always the result of human modification, although rocky ridges may support a natural pine-dominated canopy," which underscores the fact that much of the forest in the foothills and mountain region of north Georgia has been heavily altered by past man-made disturbances. In fact, the official records of inventory, acquisition and ecological studies conducted by Ayers and Ashe, 1905, page 54, concludes that in 1900, pitch pine constituted only 1.34% of the overall canopy in the Southern Appalachian Mountains, and shortleaf pine less than 1% at only .43%. Clearly, the Foothills Draft Restoration Plan places far too great an emphasis on pine restoration in areas other than dry ridges or rocky bluffs, where predominantly pine stands never naturally existed.

Ecosystem Management Similarly, the document emphasizes that forest health and wildlife habitat depends on management to restore disturbance-dependent forest types. So much so, that it is repeated and highlighted in both Goal 3 and Goal 8. This type of "natural disturbance driven management" inherently includes the belief that wind shear, tornados, disease outbreaks and periodic wildfire fire events resulted in forest types that regenerate as even age stands, with large areas of early successional habitat, open canopies and enhanced oak reproduction. While we do acknowledge that periodic wildfire as a result of lightning-ignited fire on ridge crests did influence the establishment of fire dependent forest community types, including stands of Table Mountain, pitch and shortleaf pine, and that wind throw from wind shear, occasional tornados and ice storms are a factor in reproduction cycles, we do not believe that native forest types in the Blue Ridge Ecological Province regenerate through a succession of even-age stands. Conversely, and again relying on the official Forest Service records of acquisition and inventory from the turn of the century prior to heavy man-caused disturbance, these inventory records clearly document the presence of predominantly broadleaf forest types, that regenerated by the process of gap phase reproduction of forest canopies of "all ages" of trees—from dominant, co-dominant and understory, to shrub and herbaceous understory layers—that existed all within the same, uneven aged stand. Research overwhelmingly shows that our native forest consisted originally of a broadleaf forest dominated by oak-hickory forest types, that regenerated as a result of canopy gap openings caused by natural senescence or wind throw, with forest canopy openings no bigger than twice the height of the tallest trees, which allowed sufficient sunlight to regenerate shade intolerant species, particularly oak dominated forest types.

Woodland Habitat & Successional and Structural Diversity In both the sections of the document concerning woodland habitat, and later in the section on successional and structural diversity, it is stated that complex vertical structure, including sub-canopy layers and complex understories, is lacking

in our present closed canopy forest of predominantly mid to late successional forests. The reduction of timber management is cited as the primary reason for this lack of vertical structure. Yet, the document states that this needed complex vertical structure would naturally develop, but then writes it off as an option because this would take decades to centuries to develop. The document prescribes frequent fire and timber management to create this vertical structure, rather than allowing the forest to develop naturally. This does not take into account that many of our soils, especially in woodland habitats and that occur on south and west-facing slopes, have been highly eroded as a result of poor management practices in the past, that has reduced the soil humus layer to an almost nonexistent state. These forests, if burned too often, never accumulate duff layers to rebuild soil fertility and biotic structure. It also does not take into account that areas of our forest are just now beginning to develop old growth characteristics, and will naturally develop the complex vertical structure that provides critical habitat for species of plants and animals, while also developing a richer soil layer. We do not believe this process of benign neglect leading to a more complex vertical structure will take centuries but, in fact, is happening in many maturing stands at present. Furthermore, we hold that much of what is called “oak decline” is the ongoing natural process of self-regulation, whereby the number of stems per acre declines over time, as represented by a reverse J-curve when plotted on a graph. We also believe that the Chattooga River watershed’s naturally abundant rainfall and wet climate prevents widespread and frequent natural wildfires except on dry ridges, and facilitates the quick break down of forest litter and fuel loads while building forest soils.

Timber Management We are, however, in acknowledgement of the need for some use of timber harvesting and wildlife openings as a surrogate for keystone species such as elk, that no longer exist, and beaver, which have been greatly reduced in number. Both ungulates and herbivores once played an important role in maintaining early successional habitat. We believe that in areas of the landscape where road systems already exist, gap phase silvicultural treatments, including single tree and small group selection, is appropriate, but that group selection openings should not exceed one-quarter acre in size. In many areas, again, where roads already exist, we recommend maintaining more frequent wildlife openings.

Unique Habitats We support recommendations in the document for managing for unique habitats including bogs, fens and canebrakes. Concerning canebrakes, which once provided much habitat for many species of concern such as the Swainson’s Warbler and the Pearl-Eyed Butterfly, we believe there are ideal areas such as the old fields below the West Fork of the Chattooga River to establish canebrakes on traditional sites.

Watershed Health The sections on watershed and aquatic health, and roads and watershed health are inseparable. The greatest source of sedimentation that enters the Chattooga River is from Forest Service Roads (Dr. David Van Lear, *Sedimentation Sources in the Chattooga River Watershed*, 1995). Since aquatic habitat is greatly affected by sedimentation, we believe the Foothills Restoration Plan should identify roads for decommissioning, which would also be beneficial for creating needed wildlife openings and corridors. Road decommissioning kills not two, but three birds with one stone, by eliminating a major source of sedimentation that degrades aquatic habitat, while creating wildlife

openings and corridors for species of plants and animals to adapt to climate change, and it also saves money in the long run that would otherwise be spent on road maintenance.

Recreation We agree with the majority of the document’s recommendations for sustainable recreation use, with the exception that providing Off Highway Vehicle (OHV) use trails on national forests is inappropriate. OHVs create noise and emit greenhouse gases, as well as contribute to erosion and sedimentation.

Wildfire We agree with the project’s goals for protecting communities from wildfire. The risk of wildfire destruction has increased as climate change has produced more extended periods of drought, resulting in about 30,000 acres of wildfire in the Southern Blue Ridge Mountains last year. We are in favor of a “let it burn” policy as a natural ecological component, combined with a public education program to assist private landowners in managing their lands to protect against wildfires.

Climate Change In addition to this subject critique, we would add the following comments concerning important omissions from the document. Of great concern is the complete absence and discussion of managing forests to mitigate and to facilitate adaptation to the effects of climate change. Although the draft restoration plan does briefly discuss connectivity, it does not expand the concept to include detailed discussions of re-zoning forest plans to provide for connecting large core areas with wildlife corridors, to allow adaptation of both native plant and animal species as habitats change as a result of climate change. Nor is there any discussion in the document that addresses the value of restoring and protecting a network of old growth forests as essential habitat and also carbon sinks to help reduce greenhouse gas emissions.

Ecosystem Restoration Another omission in the draft restoration plan is the fact that forest managers are often hamstrung by goals and objectives in existing forest plans that are vastly outdated. For example, current forest plans are based on management often weighted toward timber production using cutting cycles based on culmination of mean annual increment models for maximum fiber production, with little regard for timber quality or ecological restoration values. As a result are restoration models that favor planned timber targets. Noted forester Leon Minckler, in his book *Woodland Ecology*, addresses the conditions that now exist in our foothills and Blue Ridge Mountain forests in the following passage: “Pioneer [forest] types are characteristically of one species, with trees of about the same age. They may quickly occupy a site after some severely destructive action such as land clearing, fire, disease, insect attack, floods, and in some cases, clear-cutting. Pioneer types are temporary and, if left alone, will convert naturally to the more stable hardwood types. Some species are intermediate or transitional in nature. Species like shortleaf pine, yellow pine, yellow poplar, and white pine often invade disturbed areas, but also form a part of the later, mixed forest. These species often have high timber value and may be favored by foresters.”

Please accept these comments in order to help reach consensus on protecting and restoring our native forest landscape. We look forward to your reply.

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